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ABSTRACT

Designed for vocational educators, seven sections of information concerning vocational education for students with handicaps are provided in this resource guide. Section I provides an overview of major federal legislation, the Individualized Education Program (IEP), and definitions of specific handicaps as defined by Missouri statutes. Section II describes the role and function of a vocational resource educator. Guidelines and considerations for vocational assessment and evaluation are presented in section III. Also included in this section is an annotated bibliography of various assessment instruments (aptitude, interest, and work evaluation). Section IV discusses four areas of concern for accommodating handicapped students: physical environment, curriculum, time requirements, and equipment and materials. Instructional considerations for teaching handicapped students are presented in section V. Topics include the IEP, preparing the classroom environment for mainstreaming, teaching techniques for specific handicapping conditions, classroom organization and management, and community and parent involvement. Section VI discusses job placement, employment, and follow-up. The concluding section contains a list of resource materials (books, guides, bibliographies) and a list of directories of services and materials. (JH)

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ED170452

MAINSTREAMING STUDENTS IN VOCATIONAL EDUCATION:

A RESOURCE GUIDE FOR VOCATIONAL EDUCATORS

June 1978

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U S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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AN APPROPRIATE COMPREHENSIVE
VOCATIONAL EDUCATION WILL BE
AVAILABLE AND ACCESSIBLE TO
EVERY HANDICAPPED PERSON

. . . U. S. COMMISSIONER OF EDUCATION
June 16, 1978

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To these people we offer our thanks!

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PREFACE

In recent years, considerable attention has been directed toward handicapped individuals and the fact that too many have not been given the opportunity to participate in vocational programs and other educational services. Thus, a concentrated effort is now being given throughout the country to respond to the long overdue training needs of people with handicaps. Vocational educators are particularly important in helping handicapped individuals prepare for earning a living. Experience has shown that with proper vocational preparation, handicapped individuals can secure and maintain employment in hundreds of occupational areas.

This Guide is written to assist vocational educators learn more about handicapped individuals and their vocational education needs. It is the result of a project conducted at the University of Missouri-Columbia from January 15 - June 30, 1978, funded by the Research Coordinating Unit of the Missouri Department of Elementary and Secondary Education from vocational education funds. We have worked closely with state and local educational personnel in developing this Guide and an Administrator's Guide. The project also studied the feasibility of creating a new type of individual for area vocational schools--a Vocational Resource Educator (VRE). The results of this endeavor clearly revealed the need for such an individual to serve as a source of assistance to teachers, students, parents, and community personnel in providing appropriate educational services to these students. The role and function of the VRE is presented in Section II.

I would like to recognize the specific efforts of our project staff, all of whom have considerable training and experience in classroom teaching. Lynda West coordinated the field efforts with our Advisory Committees, participating schools, consultants and others. Clifford Schneider worked primarily on the research aspect of the VRE study which included questionnaire design, analysis and reporting. Carolyn Magnuson assumed major responsibility for writing the Guide. Gene Conley typed the two publications in their entirety.

We hope this publication will be of value to vocational educators as they attempt to meet the many training needs of our handicapped citizens.

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SECTION I
OVERVIEW OF VOCATIONAL EDUCATION FOR STUDENTS WITH HANDICAPS

With an increased sensitivity to the human rights of all people has come a greater awareness that people with handicaps can indeed assume roles as productive workers in our society. The challenge for all of education has become finding the best placement for students with handicaps so they each can become all they are capable of becoming. Vocational education offers one alternative. In the past, very few people with handicaps were trained to assume a specific occupational role; thus, they frequently were dependent upon others for support. With the help of Federal and State legislation, this situation is gradually being changed for the better. An increase in the number of students with handicaps in vocational education requires that vocational educators receive adequate preparation and support in their efforts to provide the most appropriate education for these students. It is the intent of this Resource Guide to provide suggestions and resources that will help vocational educators in their roles as support personnel involved in the total effort.

Challenge for vocational educators

Legislation

For the past twenty years legislation has talked about providing programs and services for persons with handicaps, but it has been only within the decade of the 70s that real action has been taken to provide legislation that carries the impact for change. There are three pieces of Federal and one piece of State legislation with which everyone working with people who are handicapped should be familiar. They are:

Federal legislation

1) The Rehabilitation Act of 1973, Sections 503 and 504 (PL 93-112);
2) The Education Amendments of 1976, Title II--Vocational Education (PL 94-482);
3) The Education for All Handicapped Children Act (PL 94-142);

State legislation

4) House Bill 474 (Missouri enabling legislation for PL 94-142).

PL 93-112

Section 503

Section 504

Sections 503 and 504 of the Rehabilitation Act of 1973 (PL 93-112) protect the civil rights of persons with handicaps. Section 503 is important to vocational educators because it deals with affirmative action for employers. Any employer with a federal contract must take affirmative action to hire qualified persons with handicaps. Section 504 prohibits discrimination against all persons with handicaps by any program or activity receiving federal assistance. Those receiving federal funds may not discriminate against persons with handicaps in regard to employment, program accessibility, education, health, welfare or social services.

PL 94-482

The Education Amendments of 1976 (PL 94-482) require that 10% of each state's federal vocational funds be expended to cover up to 50% of the total excess cost of providing vocational education for students with handicaps. Excess costs are those costs which are above the cost of educating a non-handicapped student. The Act further requires that vocational programs for students with handicaps must be consistent with state plan requirements under the Education for All Handicapped Children (EHC) Act.

PL 94-142

The Education for all Handicapped Children Act (PL 94-142) is designed to provide free and appropriate education to all handicapped students between the ages of 3 and 21. According to the Act, vocational education must be specifically planned so that students with handicaps may participate with non-handicapped students to the maximum extent possible.

HB 474

Missouri House Bill 474 guarantees Missouri children with handicaps the right to a free, appropriate public education. A majority of the provisions of the Education for All Handicapped Children Act are addressed in the State legislation.

A human right

The essence of each of these legislative mandates is that persons with handicaps shall have equal access to education and employment--certainly a reasonable right for any person.

Everyone gains

Vocational education has a unique opportunity to help people with handicaps bridge the barriers to their becoming wage earners. Training people to become wage earners will reap benefits for us all. The person will have a greater sense of self-worth and belongingness with his or her productivity. Monetarily we will all benefit. If we do not prepare people with handicaps to earn a living, they will be dependent upon society for support. If we do prepare them to earn a living, not only will the money required to support them be saved, but also they will be putting money back into the economy. Thus, everyone will gain.

Individualized Education Program

IEP

A major provision of PL 94-142 and HB 474 is the development of an Individualized Education Program (IEP) for each student identified as being handicapped. An IEP identifies long and short range goals and objectives and outlines the specific activities, services and people to be utilized in accomplishing the goals. The legislation provides for the specifics of the development, implementation and evaluation of the education program for each student. At every step of the IEP process the student is protected from inappropriate placement.

An IEP is developed by a team of school personnel and is based on a multi-faceted assessment of the individual student. Vocational educators should be a part of the team that develops the IEP for students who are or will be enrolled in vocational education. The IEP is discussed in detail in Section V of this guide.

Defining "Handicapped"

Each of the bills has a section devoted to defining the meaning

of "handicapped" as it relates to individuals served by each. Essentially "handicap" may be defined as a mental or physical condition which limits a person's ability to function completely in society. For school-aged persons this is further identified as a condition which clearly limits participation in regular educational programs.

Definitions of specific handicaps

The Missouri statutes define the handicapping conditions as follows:

EMR

1) Educable Mentally Retarded (EMR): Those students who are capable of academic, social, and vocational training but require specialized instruction to realize maximum skill development and meaningful integration into adult society.

SLD

2) Specific Learning Disabled (SLD): Those students who have a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written. It may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations.... The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage.

3) Behavior Disordered (BD): Students that exhibit one or more of the following characteristics over an extended period of time and to a marked degree:

- Difficulties in learning that cannot be explained by intellectual, sensory, or other health factors;
- Difficulties in building or maintaining satisfactory interpersonal relationships with peers, parents, and teacher;
- The general pervasive mood of unhappiness or depression;
- A tendency to develop physical symptoms, pains, or fears associated with personal or social problems.

Speech and Language Impaired

4) Speech and Language: Those students whose speech or language deviates so far from other individuals in a

group that it calls attention to itself, interfers with communication, or adversely affects the self-image of the student.

5) Developmental Speech and Language: Those students whose language disabilities are too severe to be remediated through remedial speech or language therapy sessions alone. In order for these students to progress academically, they require placement in a class designed for children with severe language disabilities.

6) Orthopedically Disabled: Those students who have conditions such as cerebral palsy, spina bifida, muscular dystrophy, congenital defects (such as hydrocephalus, club feet, heart conditions), and adventitious defects (such as poliomyelitis, rheumatoid arthritis, osteomyelitis), and other physical defects in varying degrees requiring special adaptation and modification of school facilities and equipment.

Orthopedically handicapped

7) Partially Seeing: Those students whose visual acuity is so limited as to require specific educational compensation of a significant nature in order that the learning needs of the student can be adequately met by the school district. As a general rule, the partially-seeing student evidences a central visual acuity range of 20/70 to 20/200 in the better eye with best correction by glasses.

Visually impaired

8) Blind: Those students whose visual acuity is so limited as to require a comprehensive educational program involving compensatory services including but not limited to large print materials, utilization of recorded materials, mobility training, developmental braille skills, and self-help and daily-care skills development. Legal blindness is generally characterized by a visual acuity of 20/200 or less in the better eye after best correction by glasses or peripheral vision subtending an angle not greater than twenty degress.

9) Hard of Hearing: Those students whose hearing is impaired to the extent that language, social, and/or academic development is restricted to a significant degree educationally but who is not eligible for placement in classes for the deaf. Generally, students who are eligible for placement in classrooms for the hard of hearing exhibit hearing loss in a range from 40 dB to 60 dB (ISO). In many instances, students will exhibit a mild hearing loss of 25 dB to 40 dB (ISO), and such students may profit from preferential seating in the classroom with teacher assistance.

Hearing impaired

10) Deaf: Those students with no hearing or limited residual hearing sensitivity which is not sufficient to enable understanding of spoken language nor to develop language successfully even with a hearing aid without specialized instruction. (Missouri Department of Elementary and Secondary Education, 1977, pp. 15-24).

The Special Education Division of the Department of Elementary and Secondary Education publishes regulations, standards and procedural guidelines which provide a more detailed description of each handicap. This guide entitled Missouri Special Education Services should be available through the special education personnel in each district.

VRE: Program support

Working with students who are handicapped offers a real opportunity for everyone involved in Vocational education. It is a challenge that can (and must) be met through the cooperative efforts of everyone involved. The Vocational Resource Educator will provide much of the support and assistance required to successfully implement the mainstreaming program.

Note: The rules and regulations for the federal legislation appeared in the following Federal Registers:

PL 93-112 Vocational Rehabilitation Act, Section 503: January 18, 1977

PL 93-112 Vocational Rehabilitation Act, Section 504: May 4, 1977

PL 94-142 Education for Handicapped Children Act: August 23, 1977

PL 94-482 Education Amendments of 1976 (Title II) October 3, 1977

Reference

Missouri Department of Elementary and Secondary Education. Missouri Special Education Services. Jefferson City: Author, 1977.

RESOURCES

The following resources will provide the user of this guide with additional information regarding legislation and the identification/understanding of students with handicaps.

Altfest, M. Vocational education for students with special needs: a teacher's handbook. Fort Collins: Colorado State University, Dept. of Vocational Education, 1975.

Arkansas Rehabilitation Research & Training Center. The rehabilitation of the deaf: A training guide. New Orleans, LA: Eleventy Institute on Rehabilitation Services, 1973.

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Halloran, W., Foley, T., Razeghi, J. & Hull, M. Vocational education for the handicapped: resource guide and federal regulations. Austin: Texas Education Agency, 1978.

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SECTION II
VOCATIONAL RESOURCE EDUCATOR

Role

The Vocational Resource Educator is intended to be a person who fulfills the role of a facilitator in the mainstreaming process. He or she will be responsible for helping handicapped students make a smooth transition into vocational programs as well as helping classroom teachers plan and implement appropriate educational programs. The VRE will serve as a resource for teachers, students, parents and community members. The role will require expertise in special education and vocational education.

Facilitator

Resource

As a facilitator the Vocational Resource Educator will work with other school personnel planning and/or implementing staff development programs. He or she will assist with general program planning for students with handicaps. She or he will work with school and community personnel to identify and utilize resources in the best possible way. Assuring the placement of students with handicaps in jobs will be a part of the role of the VRE. In this capacity he or she will work with the school's placement personnel to facilitate handicapped students' transition from school to work.

Staff and Community development

Job placement

Responsibility to Students

The VRE will have an indirect responsibility to students. That is, while student success is the objective of the VRE's efforts, he or she will not have direct instructional responsibilities. The VRE will be responsible for a specific number of students with handicaps and will coordinate and monitor their vocational education programs. This responsibility will include making sure the student is appropriately placed and that there are no overlaps or gaps in the student's total educational plan.

Placement

Although the VRE will not have direct teaching responsibilities with students, he or she will have regular contact with the stu-

Support

dents. The VRE will be a person to whom students with handicaps can turn if they need extra help or support at any time. If a teacher perceives a student has a problem or need that should be handled outside the classroom, the VRE will work with the student to find the most appropriate solution or resource for solution of the problem.

Job placement

The job placement functions of the VRE will mean that he or she will have personal contact with the students as they seek employment. Although the school's placement official will be the primary person responsible for placing students with handicaps, the VRE will work with both to assure the most appropriate placement.

Follow-through

Thus, though the VRE does not have a direct instructional responsibility to handicapped students, he or she will have a direct responsibility for following through on each student's vocational education program to assure that the student's needs are being met.

Responsibility to Other Staff Members

Joint identification of responsibilities

The VRE will have a direct responsibility to other staff members to provide services and/or resources which will help them as they work directly with students who are handicapped. Because the VRE is a facilitator, the specific responsibilities will be identified jointly with classroom teachers and administrators, according to the needs of each school.

The Vocational Resource Educator will be involved in the initial planning for placement in vocational education of individual students. He or she will work with vocational educators as well as other school personnel when each handicapped student's individualized education plan is developed. Following placement in vocational education the VRE will work with staff members of the sending school as well as the vocational school to assure that the programs

implemented for individual students complement each other. He or she will serve as a liaison between the two when changes in a student's program are indicated.

Liaison

The VRE will assist classroom vocational teachers with classroom and curriculum modifications which will enable students with handicaps to have an equal opportunity for success. These responsibilities will range from working with a resistant teacher who doesn't see any reason to make changes in classwork for one student to an eager teacher who wants to have as much material and as many ideas as possible. The primary responsibility in this area is to meet teachers where they are and to help each one find the most appropriate resources for his or her needs.

Classroom support

The classroom management aspect of the VRE's responsibilities will range from helping teachers to plan ways of effectively dealing with behavior problems to assisting in the planning of classroom organization. Knowing that the classroom will run smoothly while meeting the needs of students with handicaps will encourage teachers to try more activities. The VRE should recognize that some teachers will be more willing than others to modify their existing classroom management techniques. Efforts should be directed toward helping all teachers make changes with which they feel comfortable.

Planning effective organization

The VRE's responsibility to other staff members can be summed up in one word--support. That support will come in many forms, but no matter what the form, the success of the mainstreaming effort will rest upon its dependability and availability. The challenge for the VRE will be to identify and provide the most appropriate support for each of the persons with whom he or she works.

Support system for teachers

Responsibility to Parents and Community

The Vocational Resource Educator has the responsibility of working

Awareness

with parents and other community members to assure that they are aware of the programs offered for students with handicaps. The responsibility to the community at large will differ from the responsibility to family members. The responsibility may be either direct or indirect, that is, the VRE may do some of the activities herself or himself or may simply make sure other resources are available for carrying out the responsibility. Section V of this document outlines specific activities for involving parents and community members.

Develop understanding

The VRE will be responsible for assuring that public relations efforts are directed toward understanding the handicapped in terms of their potential as students and employees. They will work with community organizations to help them inform their memberships about the training opportunities that are available for students with handicaps.

Advisory Committees

Advisory Committees are excellent resources for program support. The VRE will be responsible for making certain that they are apprised of the school's efforts at preparing all students to become wage earners.

Parents

Parent education will be a responsibility of the VRE. Helping parents to better understand their handicapped sons and daughters will help them move closer to realizing their full potential.

In summary, the role of the VRE requires that he or she serve as an advocate of students with handicaps in each of their enviornments--school, home, community. His or her primary responsibility will be to assure that students and teachers alike have available appropriate resources so that their mutual success will be facilitated.

RESOURCES

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SECTION III

ASSESSMENT AND EVALUATION

The assessment and evaluation process is a key to the success of any student enrolled in vocational education. For students who need special services and/or modification of programs in order to succeed it is even more crucial. It is through assessment and evaluation that students are appropriately placed.

Use a variety of instruments

Assessment should include locally developed instruments and student self-appraisal as well as standardized instruments. The total assessment of a student identified as "handicapped" will include a multi-factored assessment and may include medical, psychological, educational and/or social evaluations. All available information about a student will be utilized in determining the most appropriate educational program for each student with a handicap. If a vocational education program is deemed a part of the most appropriate education, the information from the special education assessment will be utilized as a basis for additional assessment for appropriate vocational education placement.

VRE Role

Although the VRE is not intended to be a vocational evaluator, it is important for him or her to be able to interpret and understand the nature of the assessment procedures. It is also important for the V.R.E. to be aware of other procedures that might yield additional information. The V.R.E. very likely will be involved either directly or indirectly in making recommendations for the student's Individualized Education Program. He or she must have enough information about vocational assessment to aid team members in understanding what inforamtion can be gained from the assessment.

Gain useful information

The major purpose of any vocational evaluation program should be to gain information that can be used to aid students with handicaps in vocational education. The assessment should yield information that will provide insight into the student's interests, aptitudes and probable success in specific vocational programs.

Guidelines

Legislation

Public Laws 94-142, 93-112 Section 504 and 93-380 each include guidelines to assist in the planning and implementation of a local district's policies for assessment of students with handicaps. The law which speaks most definitively to the issue of assessment is 94-142. Through the federal regulations of this legislation guidelines for the kinds of instruments, test administration procedures and the use of information gained as a result of the assessment are delineated. Section 504 of PL 93-112 links with 94-142 to provide for establishing assessment and evaluation procedures and standards to be followed before any action and/or change is made in a handicapped student's educational program. This necessitates that specific assessment procedures be established by the local education agency. Public Law 93-380 insures confidentiality of student records as well as access to records for students and/or parents. Each local district has established guidelines for confidentiality and access of records. The VRE should familiarize himself or herself with these guidelines.

Confidentiality

Federal guidelines

The assurances which are a part of PL 94-142 are designed to guard against the misuse of the assessment process. They guarantee that the assessment will be multi-faceted, non-discriminatory, and test what they purport to test. Section 121a 532 of PL 94-142 specifies that tests and other evaluation materials:

1) Are provided and administered in the child's native language or other mode of communication, unless it is clearly not feasible to do so;
2) Have been validated for the specific purpose for which they are used;
3) Are administered by trained personnel in conformance with the instructions provided by their producer;
4) Include those tailored to assess specific areas of educational need and not merely those which are designed to provide a single general intelligence quotient;
5) Are selected and administered so as best to ensure that when a test is administered to a child with impaired

sensory, manual, or speaking skills, the test results accurately reflect the child's aptitude or achievement level or whatever other factors the test purports to measure, rather than reflecting the child's impaired sensory, manual, or speaking skills (except where those skills are the factors which the test purports to measure);

6) No single procedure is used as the sole criterion for determining an appropriate educational program for a child;

7) The evaluation is made by a multidisciplinary team or group of persons, including at least one teacher or other specialist with knowledge in the area of suspected disability;

8) The child is assessed in all areas related to the suspected disability, including, where appropriate, health, vision, hearing, social and emotional status, general intelligence, academic performance, communicative status, and motor abilities.

(Federal Register, Aug. 23, 1977, p. 42496-7)

Thus, the assessment plan must take into consideration what is best for each individual student and select the specific instruments and/or procedures to be used on that basis. The implications of the law are that examiners may deviate from standardized testing procedures to accommodate the needs of the student so long as this is noted in the assessment report. Further, it implies that when interpreting results, the interpretation should reflect the specific abilities of the individual student in comparison to himself or herself rather than in terms of the norm population. The intent of the law is to guarantee that students are placed in special and/or modified programs on the basis of specific needs and that the programs are planned to meet those specific needs.

Consider what's best for student

Vocational evaluation is a comprehensive assessment of a student's vocational interests and aptitudes. The key word is "comprehensive". Because there are many factors to consider in effective placement, the procedures should include a variety of instruments. Plans should be made to observe, through structured and unstructured assessment situations, a student's interests, skills and work be-

Vocational evaluation

havior. The plan should include informal interviews with the student as well as psychometric testing.

Considerations for Assessment Plan

Student readiness

An important aspect of preparation for the assessment plan is the readiness of the student. The CEC Vocational Education Policy Manual states that a lack of appropriate behaviors may result in poor performance on vocational assessment tasks. With proper preparation, i.e., readiness for assessment, a more accurate assessment may be obtained. The manual suggests that the following be considered:

- Establishing criteria for readiness
- Providing training and practice for assessment when appropriate
- Remediating deficiencies discovered during assessment
- Repeating assessment where appropriate

(Council for Exceptional Children, 1978, Policy 305)

School or agency?

A second factor to consider in establishing a vocational assessment program is where the assessment will take place, i.e., whether the school will do the evaluation or an agency will be contracted to do it. In some instances a school might not have the facilities for a complete vocational assessment while a community agency might. If an agency is to be contracted to do the assessment, they must provide assurances that they in fact can provide adequate services. The agreement between the agency and the local education agency must be explicit in terms of expectations and provisions of the assessment and the ensuing assessment report.

Who's responsible?

A third factor to consider in planning is who will be involved in the assessment program. If the assessment is to be conducted by an agency outside the school, it is important that in-school personnel be assigned the task of coordinating school and agency efforts. If the assessment is to be carried out in a school-based center, personnel for each phase must be identified. It may be that some phases, e.g., overall coordinating and scheduling will best be handled by a

full-time person while other aspects, e.g., interpreters for deaf students or readers for blind student, will be utilized on a part-time or occasional basis.

Selection

The selection of standardized assessment procedures should be done with extreme care. For students with handicaps it is vital that the instrument be valid for the purpose intended. The results should not depend on the student's ability to perform in an area in which he or she is handicapped, unless that is the factor being measured. The CEC policy manual for vocational education, suggests that the following be included as a part of the guidelines for selection of standardized instruments:

- Student's probable motivation and ability to achieve on the particular test;
- Reality of task to actual employment situations;
- Meaningfulness to use assessment of a single trial performance;
- Usefulness of comparison of scores with general population norms;
- Adaptability for use with handicapped students;
- Validity for students with particular handicapping conditions;
- Value of using criterion referenced instrument instead of norm referenced

(Council for Exceptional Children, 1978, policy 308)

Alternatives to formal testing

Also suggested are alternatives to standardized tests. Alternatives might include:

- Developing instruments locally.
- Revising published instruments and adapting to local needs.
- Individualizing the administration of standardized vocational instruments and interpreting results on the basis of local criteria and knowledge of the handicapped individual.
- Not using a test but basing assessment on observation of performance, teacher assessment, parental judgement,

anecdotal records, and so on.

(Council for Exceptional Children,1978, policy 308)

The vocational assessment battery should include situations which allow for the student's involvement in or use of work samples, exploration of actual courses via a "tryout" period, and work behavior. Utilization of these processes will enable a more successful and effective education plan to be developed.

Try out jobs

Giving students the opportunity to try out work samples will give them a chance to try out specific work tasks. In this way, they will know whether they are interested in learning more about occupations using those tasks. There are several work sample kits available commercially. A description of several of these begins on page 28. In addition, it is possible to develop work sample kits which reflect local training and job opportunities. It is important, when selecting the tasks and/or kits to be utilized, that they reflect actual work tasks, that there is an opportunity for learning the tasks and most importantly that there are employment opportunities in the areas sampled.

Try out classes

One way to predict probable success in a vocational program is to provide the opportunity to "tryout" for classes in which students have demonstrated an interest and aptitude. Based on information obtained in the other assessment procedures, the students would have a chance to gain experience in the actual tasks required for the course. This could be accomplished in a number of ways. CEC suggests considering the following:

- Placement in a regular vocational education course at an appropriate point for the student to have a satisfactory participation (such as when an introductory or fairly simple instructional module is being taught).
- Placement within the regular course with small group instruction provided.
- A special course for handicapped students which includes ex-

ploratory vocational shop activities representative of the 15 major career clusters (as defined by USOE).

- Individualized programmed instruction (self-contained vocational exploration package) which replicates actual job requirements.
- Special residential career exploration program (available in some communities).

(Council for Exceptional Children, 1978k Policy 310)

Work behavior

Throughout each of the phases of assessment, it is important to observe the students work behaviors. Non-skill areas such as attention span, work tolerance, grooming, punctuality, emotional stability and self-confidence will have an impact on the student's success in the educational as well as work setting. With training, deficiencies in these areas can be eliminated. By helping students to develop positive work behaviors, their ultimate on-the-job effectiveness will be enhanced.

Report

The final phase of vocational assessment is the assessment report. This report will provide the basis for the development of the student's Individualized Education Program (IEP). There should be a standardized form which will help evaluators provide a succinct reporting of the assessment and results. The CEC policy manual suggests that the following be included in the report:

- Readiness skills for assessment.
- Specific traits assessed (behavioral, aptitude).
- Results of the various components of assessment.
  - Test results
  - Work sample results
  - Production records from workshop or prevocational activities
  - Results of exploratory course tryouts
  - Results of vocational counseling
- Specific problems in various areas of assessment.
- Major assets.

- Determination of potential for vocational training and placement.
- Supportive needs required to achieve vocational success (medical help, psychological counseling, social skill development).
- Physical modifications of equipment and facilities that are needed in the vocational training area selected.
- Recommendations for follow-up services.
- Recommendations for vocational training and placement.

(Council for Exceptional Children, 1978, Policy 312)

A consistent format will increase the efficiency of IEP meetings.

Testing Students with Handicaps

When testing students with handicaps certain special considerations need to be made. The tests selected should take into account the effects of the individual's handicap on the test procedures and results. Some general things to consider are:

Considerations

- Language disability or limitation may result in difficulty in understanding or responding to questions.
- Delayed or slow response patterns caused by a handicap may result in an inability to respond within time limits.
- Lack of/or limited muscle control may make performance on manipulative items difficult.

Some general suggestions for maximizing usefulness of information obtained from tests are as follows:

Getting the most out of tests

- determine the degree of handicap and its effect on the student's understanding and performance of test;
- use practice items to assure understanding of procedures;
- minimize anxiety by administering easier items first;
- administer performance items first if handicap limits verbal ability or verbal items first if handicap limits performance ability;
- arrange physical surrounding to accommodate handicap, e.g., front of room seating for minimal hearing impairment or sufficient lighting for visual impairment;

- allow extended time limits if test is measuring capacity for performing a task;
- shorten test periods to accommodate fatigue.

The vocational assessment report should reflect any changes or modifications that were made in test procedures. This will help anyone reading the report to accurately interpret the results.

Types of Assessment Instruments

When choosing assessment instruments, those selected should reflect information about a student's aptitude, work interests, general intelligence, present achievement and self-appraisal. A battery which has instruments to assess each of these areas will yield useful information.

Probable success

Aptitude tests are designed to predict a student's probable success in a given occupation. They measure a student's ability in areas that have been identified as vital to satisfactory performance in that occupation or field. Based on a student's current ability, a reliable aptitude test predicts probable success.

Student interests

Work interests may be measured in a variety of ways. There are pencil and paper tests available which measure interests. A more life-like way to determine a student's work interests is through the use of techniques mentioned earlier: work-sampling, hands-on experience, tryout plans in courses. For students with handicaps these informal measures are more effective.

General ability

General intelligence tests must be used with extreme caution because a student's handicap can adversely affect the results. If intelligence tests are utilized, they should be individually administered and interpreted in terms of the effect of the handicap on the test results.

Current achievement

Achievement tests estimate a student's current level of achievement in specific areas. Generally they are used to measure academic success, but may also be used to measure specific vocational skill areas. Standardized achievement tests should be scrutinized carefully to assure that they do indeed measure what they purport to measure.

Student's idea about self

Self-appraisal is an important type of technique as it allows a student to evaluate himself or herself and can be used in any area. Some students may have difficulty with this type assessment at first. Being evaluated by others is a fact of student life and changing that pattern will require practice.

The resource part of this section provides a listing of assessment sources.

References

Council for Exceptional Children. Administrative policies for vocational education of handicapped students, Davis, S., Project Director. Reston, VA: Council for Exceptional Children, 1978.

RESOURCES

Assessment Instruments**

Aptitude Tests

Crawford Small Parts Dexterity Test. This performance test measures fine eye-hand coordination and contains a board with 42 holes and three bins for pins, collars and screws. The testee uses a tweezers to pick up a pin and place it in a hole on the board and a collar over each one. After 36 pins and collars are assembled, 30 screws are placed through a plate with a screw-drive. Percentile norms are available on industrial and other groups. It is a motivating test for many individuals and is worthwhile addition for guidance endeavors.

Source: Psychological Corporation
304 East 45th Street
New York, N.Y. 10017

General Aptitude Test Battery (GATB). A group test comprised of 12-subtests measuring nine aptitudes: general learning ability, verbal, numerical spatial perception, clerical perception, motor coordination, finger dexterity, and manual dexterity. The battery's sixth grade reading level limits its use with many handicapped individuals. Persons in wheelchairs and those who have upper extremity handicaps are limited on some tests. Formal training in assessment procedures is usually required before it is released.

Source: Missouri Employment Service
Jefferson City, Missouri

Minnesota Spatial Relations Test. This test consists of four form boards and is designed to measure speed and accuracy in disciminating odd sizes and shapes for mechanical tasks. The testee places blocks in their proper places on each board. The test is timed and generally takes 15 to 30 minutes. The test would be appropriate for the deaf and mentally retarded but not the blind or those with upper extremity handicaps.

Source: American Guidance Service
Circle Pines, MN

Nonreading Aptitude Test Battery (NATB). A non-reading version of the GATB which can be administered to groups of up to six individuals. There are 14 tests measuring the same nine aptitudes as the GATB. Two deviations from the

**Test Descriptions are adapted from Brolin and Kokaska (1978).

GATB are: there are no arithmetic problems and vocabulary items are presented orally. Although the NATB was designed for disadvantaged persons, it has application for certain handicapped individuals. The physically handicapped would be limited as described previously for the GATB. Because of its length of administration and interpretation as well as the above mentioned limitations, it is not used much by the employment service. The employment service should be contacted to ascertain its present status and usage.

Source: Missouri Employment Service
Jefferson City, Missouri

Pennsylvania Bi-Manual Test. This performance test requires the individual to assemble 105 nuts and bolts and to place them into holes on a board. It assesses fine finger dexterity, gross arm movements, and eye-hand coordination. Disassenbly is also required for this timed test, which generally takes 10-15 minutes. The test is useful with blind, deaf, mentally retarded individuals.

Source: American Guidance Service,Inc.
Circle Pines, MN.

Purdue Pegboard. This performance test measures fine finger dexterity and gross movements of the hands. It requires the individual to place pins in holes with the right, left and both hands and to assemble pins, collars, and washers on the board in a minute's time. The test takes 10-15 minutes. There are industrial norms in percentile form. It can be used with the mentally retarded and deaf, but is not appropriate with the blind.

Source: Science Research Associates

Revised Minnesota Paper Form Board Test. This test consists of 64 two-dimensional diagrams cut into separate pieces and measures the mechanical ability needed for visualizing and manipulating objects in space. Each diagram has five figures with lines indicating the different shapes out of which they are made. The testee chooses the figure composed of the exact parts shown in the original diagrams. The test can be administered to a group and takes about 20-25 minutes. It is not appropriate for blind individuals but the deaf and higher functioning retarded persons should be able to take it.

Source: Psychological Corp.
304 E. 45th Street
New York, N.Y. 17

Social and Prevocational Information Battery (SPIB). Not an aptitude test as such, this test was designed to assess knowledge of skills and competencies considered important for the ultimate community adjustment of mildly retarded students. The nine tests are directly related to five long-range goals of work-study programs at the junior and senior high; employability, economic self-sufficiency, family living, personal habits, and communication. Both mildly and moderately retarded persons' knowledge of social and prevocational information can be assessed. It is substantially related to actual performance in these domains.

Source: CBT/McGraw Hill
Del Monte Research Park
Monterey, CA 93940

Interest Tests

Career Awareness Laboratory (CAL). This is an integrated hardware/software system consisting of six communications matrix network tables for 12 students each; 19 activity games, puzzles and materials; 19 sound/filmstrips to introduce the basic concepts on which lab activities are based and to provide procedural instruction; three 35mm rear-screen projectors, three audiovisual tables; one group leaders Manual; three games and activity books and 12 participant workbooks. The system was not specifically designed for handicapped students; however, it could be used with some handicapped individuals. It is intended to assist persons to become aware of careers and engages them in decision-making activities.

Source: Singer Education Division
80 Commerce Drive
Rochester, NY 14623

Minnesota Importance Questionnaire. This instrument focuses on an individual's vocational needs in areas such as ability utilization, achievement, activity, advancement, authority, company policies and practices. There are 210 items and the subject is asked to choose one statement from each pair that is most representative of a characteristic for his or her ideal job. The last twenty questions ask the subject to indicate whether or not each of the twenty needs assessed by the instrument is important in his or her ideal job. The MIQ can be administered in about 40 minutes and requires about a fifth grade reading level. The instrument is appropriate with most handicapped persons although blind and lower-level retarded individuals are limited in its administration.

Source: Vocational Psychology Research
University of Minnesota
Minneapolis, Minnesota

Reading-Free Vocational Interest Inventory. This is a pictorial instrument requiring the subject to make one choice from three illustrations. There are several job cluster scales for males and also separate ones for females. The job areas were chosen from those in which mentally retarded individuals have demonstrated proficiency and productivity. This instrument is being used widely throughout the country. Norms for public school, residential school and composite populations are available.

Source: American Association on Mental Deficiency

Wide-Range Interest-Opinion Test (WRIOT). An inventory which measures interests ranging from unskilled through professional occupations. Eighteen cluster areas and seven work attitudes are assessed. The WRIOT has 150 items, each containing three illustrations of men and women engaging in various type of job activities. The individual selects his or her most preferred and least preferred jobs. The inventory can be administered to groups in 50-60 minutes. No reading other than "least" and "most" and the letters "A", "B", and "C", is required. There are special instructions on use for "severely mentally or physically disabled persons". It is not recommended for blind individuals.

Source: Guidance Associates of
Delaware, Inc.
1526 Gilpin Avenue
Wilmington, Delaware 19806

Work Evaluation

Comprehensive Occupational Assessment and Training System (COATS). The system has four major components: Living Skills, Work Samples, Job Matching System and Employability Attitudes. Only the Work Samples component will be discussed here. The work samples assess the individual's interest, performance capability and general behavior relative to various job clusters such as: drafting, clerical/office, metal construction, sales, food preparation, medical services, travel services, barbering/cosmetology, small engines. The work samples can be administered in one audio-visual station, are individualized, self-paced and computer scored.

Source: PREP, Inc.
1575 Parkway Avenue
Trenton, N.J. 08628

Hester Evaluation System (H.E.S.). This system consists of 26 separate tests measuring 28 independent ability factors which relate to the Data-People-Things levels of the D.O.T. A master computer center is available for processing the results to job possibilities listed in the D.O.T. The computer prints out a list of specific jobs within each Worker Trait Group. The performance tests can be administered in five hours by a competent technician. Formal training in the use of the system takes 3 days in Chicago. The system is said to be appropriate for most types of handicaps, including the blind and partially sighted.

Source: Goodwill Industries
120 South Ashland Blvd.
Chicago, Illinois 60607

Jewish Employment and Vocational Service (JEVS) Work Samples. This system consists of 28 work samples. They were originally intended for use with culturally disadvantaged youth and have also been successful with many physically, emotionally and mentally handicapped individuals. The samples expose the client to a variety of vocational possibilities and relate the findings to Worker Trait Groups in the Dictionary of Occupational Titles. A two week training session is required for those who purchase the system.

Source: Jewish Employment & Vocational Service
1913 Walnut Street
Philadelphia, PA 19103

McCarron-Dial Work Evaluation System. This sytem is comprised of 17 separate instruments grouped into five factors: verbal-cognitive, sensory, motor abilities, emotional, integration-coping. The system attempts to assess the individual's ability to function in one of five program areas: day care, work activities, extended sheltered employment, transitional sheltered employment, and community employment. The first three factors can be assessed in one day; two weeks of systematic observation in a work setting are required for the other two factors. Training of one to two weeks is required depending on the evaluator's experience.

Source: Commercial Marketing Enterprises
11300 North Central
Dallas, TX 75231

MICRO-TOWER. This system of 13 work samples is for individuals with mild (educable) retardation through the normal range, adolescents and adults. A cue-stop cassette tape unit presents the instructions and a photobook is used to illustrate related occupations and various steps within the work samples. The entire evaluation takes 3-5 days. The work samples are: bottle capping and packing; graphics illustration; making change; message taking; zip coding; payroll computation; electronic connector assembly; record checking; blueprint reading; filing; want ads comprehension; mail sorting; and lamp assembly. A learning period is permitted before evaluation which is an appealing feature for individuals with learning problems. There is a feedback of results to the individual and group discussion techniques are highly encouraged as an integral part of the system.

Source: Institute for Crippled & Disabled
340 East 24th Street
New York NY 10010

The Singer Vocational Evaluation System. This is a programmed instructional hands-on evaluation system of step-by-step programmed work tasks performed sequentially at a series of sampling stations. Reading is not required as the system uses audiovisual techniques to transmit instructions. Some of the work stations are: sample making; bench assembly; drafting; electrical wiring; plumbing and pipefitting; carpentry and woodworking; refrigeration, heating and air conditioning; soldering and welding; sales processing; needle trades; masonry; sheet metal working; cooking and baking; small engine service; medical service; cosmetology; data calculation and recording; soil testing; photo lab technician; and production machine operating. Each system measures both interest and aptitude. Training in administration is not required but highly suggested.

Source: Singer Education Division
80 Commerce Drive
Rochester, N.Y. 14623

Talent Assessment Program (T.A.P.) This system consists of ten work samples which can be administered in about two hours to most handicapped individuals. The system was developed to assess the individual's functional characteristics applicable to work in industrial, technical, and service areas. Several individuals can be tested at the same time. Directions are given orally. The system consists of a battery of perceptual and dexterity tests which measure fine

and gross finger dexterity, visual and tactile discrimination and retention of details. It is not intended to be a comprehensive system but does seem to reliably assess many industrial type aptitudes that are reflective of an individual's vocational potential in these areas. Training is required to use the system and takes one and a half days.

Source: Milton Nighswonger
7015 Colby Avenue
Des Moines, IA 50311

The Valpar Component Work Sample Series. The Valpar consists of a series of 16 work samples with more being planned and developed. The work samples are: small tools, size discrimination, numerical sorting, upper extremity range of motion, clerical comprehension and aptitude, independent problem-solving, multi-level sorting, simulated assembly, whole body range of motion, tri-level measurement, eye-hand-foot coordination, soldering and inspection, money handling, integrated peer performance, electrical circuitry and print reading, and drafting. The samples are designed to provide an insight into many worker characteristics and are keyed to the Worker Trait Arrangement in the D.O.T. Two weeks of training is recommended but not required.

Source: Valpar Corporation
655 N. Alvernon Way
Tucson, AZ 85716

Vocational Information and Evaluation Work Samples (VIEWS). The VIEWS consists of a battery of hands-on activities to be used in a simulated work environment to assess the work potential of persons with learning disabilities and mental retardation. It does not require reading ability, and incorporates the use of demonstration, practice and repeated instruction to gain insight into the individual learning style and relate it to future instructional experiences. The VIEWS reveals changes in learning and performance quality and rates while assessing vocational potential in many occupational areas. Training in the system is required.

Source: Jewish Educational and Vocational Service
1913 Walnut Street
Philadelphia, PA 19103

Wide-Range Employment Sample Test (WREST). The WREST consists of ten work samples: single and double folding, pasting, labeling, and stuffing; stapling; bottle packaging; rice measuring; screw assembly; tag stringing; swatch pasting; collating; color and shade matching; and pattern making. Its primary purpose is to evaluate dexterity and perceptual abilities. Administration time is about 1½ hours for individuals and 2 hours for groups. Industrial norms, short administration time, and precise instructions are strengths of the battery. The battery is useful for moderately and mildly limited persons. No training is required for its purchase.

Source: Guidance Associates of Delaware
1526 Gilpin Avenue
Wilmington, Delaware 19806

BOOKS

Brolin, D. Vocational Preparation of retarded Citizens. Columbus: Charles E. Merrill, 1976.

Brolin, D. and Kokaska, C. Career education for handicapped children and youth. Columbus: Charles E. Merrill, (In Press).

Erickson, R. and Wentling, T. Measuring student growth. Boston: Allyn and Bacon, 1976.

SECTION IV

ACCOMMODATING STUDENTS WITH HANDICAPS

Considerations

The VRE will work closely with the administration in preparing the school environment for a total program of mainstreaming. It is important that consideration be given to physical, curricular, and equipment modifications. In addition, provision and availability of support services and psychological factors should be considered a part of overall preparation.

Physical Accommodations

Legislation

Physical facilities should be examined to ensure that no student with a handicap is unable to participate in an appropriate vocational education because the existing facilities are inaccessible or unusable. Section 504 of PL 93-112 prohibits the exclusion of any person with a handicap because the facility is inaccessible. All areas of a facility do not have to be accessible so long as all programs are readily available to students with handicaps.

Removing architectural barriers

Architectural barriers deprive students with handicaps, especially those with orthopedic handicaps, access to buildings and instructional facilities. These barriers often keep otherwise qualified individuals from participating in programs that would help them to realize their full potential. The CEC manual suggests that programs be made accessible through such methods as:

- Redesign of equipment;
- Reassignment of classes or other services to accessible buildings;
- Assignment of aides to students;
- Alteration of existing facilities or construction of new accessible facilities;
- Any other methods that result in making programs accessible to handicapped persons.

(Council for Exceptional Children, 1978, Policy 700)

Both PL 93-112 Section 504 and Public Law 94-482 (Education Amendments) mandate that facilities constructed with federal funds or those housing federally funded programs must conform to standards published by the American National Standards Institute, Inc. In addition to the above legislation, the Architectural Barriers Act of 1968 (PL 90-480) identifies and suggests ways of improving access in federally funded buildings.

In addition to making facilities architecturally accessible and usable, health, fire and safety regulations should be examined when considering the physical environment for students with handicaps. It is important that:

Checkpoints

- restrooms and toilets are readily accessible and usable;
- fire exits are identifiable and accessible;
- handrails are available in needed areas;
- hallways and other routes of travel assure safety for all handicapped students;
- drinking fountains/telephones/mirrors are usable for those in wheelchairs.

Involve students with handicaps

Involving students with handicaps in the examination and modification of the physical environment, will help to assure that all students have access to programs that will help them to become all they are capable of becoming.

Curricular Accommodations

A second aspect of the school environment to consider when mainstreaming students is the curriculum.

As will be recalled from the description and definition of students with handicaps (Section I), in order for a student to be considered handicapped in terms of vocational education, he or she must require special adaptation or modification of the regular vocational program in order to participate. There are a number of ways to modify the curriculum in order to accommodate students with handicaps. These

Consider total curriculum

will be discussed in Section V. Program offerings should be evaluated in order to determine if the current offerings can be modified to accommodate students with handicaps or if additional programs should be added. Keeping in mind the requirement that students be placed in the least restrictive environment, the development of additional programs should be done only when there is no way to adapt regular vocational programs to the specific needs of individual students. If the regular vocational program is not adaptable to certain students, yet a vocational program is deemed the most appropriate, a special vocational education may then be considered.

Time Requirements

A third aspect to be examined is the time requirement for completion of specific programs. It will be necessary to allow for flexibility in entrance into and exit from programs. The handicaps of some people may require that they have to interrupt their training for periods of time or that they are limited in the amount of training in which they can participate at any one time. In addition to flexible scheduling, it may be that the time required to attain a specific skill will need to be lengthened for certain students. Some students, particularly the mentally retarded, have full capability for learning tasks but require learning in small steps over a longer period of time.

Flexible time

Equipment and Materials Accommodation

Equipment modification is the fourth aspect to consider when planning for mainstreaming. Some students with handicaps may be able to achieve success in vocational education programs through a slight modification in the equipment to be utilized; however, a caution is in order here. It is important that equipment modifications made are realistic for future employers of the student. If the modification is one that the majority of employers in your area

Realistic modification

could not easily make, the student will still be at a disadvantage in the labor market. CEC presents the following suggestions for adaptation of equipment:

1) Installing safety devices on machines, such as:
   - guard rails
   - cover plates
   - warning plates for tactual interpretation
   - warning lights
   - warning sounds
2) Installing adaptive operating devices on machines, such as:
   - hand controls (mono-, bi-)
   - foot controls
   - hand-foot controls (Hemi)
   - head controls
   - mouth controls
3) Adapting existing equipment or securing other equipment to assist handicapped students, such as:
   - adaptive handles on tools
   - guard plates to direct finger/hand accuracy
   - left handed scissors
   - pattern guides
   - cutting guides
   - magnifying guides
   - tape recorders

(Council for Exceptional Children, 1978, Policy Area 703)

Support Services

Plan for needed support

The legislation provides for related and/or support services for students with handicaps. These services can include such things as:

- transportation
- counseling services for parents and/or student
- speech pathology
- physical therapy
- remedial assistance

It is important that the required special services be identified early so that they will be available from the start of the student's enrollment in vocational education.

In addition to the services provided for in the legislation, outside agencies will be able to provide support in specific areas. Each local community will have its own unique variety of agencies. Some places to begin seeking support are:

Outside support

- Vocational Rehabilitation
- Job Service
- Private agencies
- Service organizations

As these are considered, others will become known. The resource part of this section provides a listing of some of the agencies that can provide services.

Psychological Considerations

Developing positive attitudes of staff toward students with handicaps and of students toward themselves and each other is an aspect of mainstreaming that cannot be ignored. The psychological preparation is every bit as important as preparation in other areas. Each person will bring to the classroom his or her past experiences with handicapped persons or as a handicapped person. These personal experiences will have an impact on the mainstreaming program. With attention to this sensitive area, the impact can be a positive one. Some of the things that will help to remove the psychological barriers that exist are:

Attitudes are important

Activities

- staff development activities in which staff members are sensitized to the needs of the handicapped.
- positive-peer discussion groups in which handicapped and non-handicapped students share thoughts and concerns.
- classroom task oriented groups in which handicapped students can demonstrate to others that they are capable of participating successfully in groups.

- a buddy system in which pairs of students are responsible for assisting and supporting each other.

It has been said that for some handicapped persons, the greatest barrier to overcome is their own self-doubt. Helping others to fully accept them will aid in their overcoming that barrier.

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RESOURCES

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SECTION V

INSTRUCTIONAL CONSIDERATIONS FOR TEACHING STUDENTS WITH HANDICAPS

The primary task of the Vocational Resource Educator will be to facilitate classroom integration of students with handicaps into the regular instructional program. Because this will be a new challenge for many vocational educators, the VRE must be able to provide as much assistance as is needed by the individual instructor.

Assistance for busy teachers

Efforts should be directed toward helping already busy and effective teachers discover ways of instructing students with handicaps that will fit into the existing classroom philosophy and teaching style of that teacher. The VRE must not expect overnight changes in instructional procedures. It will be a gradual process that will require much support and encouragement.

Considerations

Teaching students with handicaps will require that educators focus their planning in a little different direction than when they're planning for non-handicapped students. Two areas that will require a different kind of consideration are:

- learner characteristics and
- task requirements.

The VRE will be able to help educators understand the major factors to consider in each area.

Learner characteristics

When considering learner characteristics, educators must think about abilities they may take for granted with non-handicapped students. They must consider such things as visual and hearing acuity, muscular coordination and mobility. Educators must predict the probable effect the learner's characteristics will have on the learning of that individual. They have to think about classroom limitations that the handicapping condition will place on the student.

Task requirements

Planning educational programs for people with handicaps means a more specific analysis of the task requirements of the course. Vocational educators have always identified the steps required to master the content of their courses. Working with

students with handicaps will require that they consider more specific tasks and components of each step

They will then need to consider the characteristics of the student in comparison with the task requirements to determine what modifications will be necessary so that the student can experience success in the course.

Another consideration in planning educational programs for handicapped students is the fact that within each occupational area there are jobs that require a higher degree of skill mastery than do others. This is an important consideration because while some students may be capable of mastering the most complex of skills, others may be capable of mastering minimum competency skills. This would enable one to do a more complex job and the other to do a less complex job in the same occupational area.

INDIVIDUALIZED EDUCATION PROGRAM (IEP)

Personalized education

The heart of the mainstreaming process is the development of the individualized education program (IEP). As was seen in Section I of this Resource Guide, PL 94-142 provides that for every student identified as "handicapped", an IEP will be developed. Although individualized is the word used in the legislation, what we're actually talking about is a personalized education program. Individualized implies that students will be working individually and will require much individual help from the instructor. While this may be true a part of the time with mainstreaming, it will not be true all of the time. As a matter of fact, this is exactly what PL 94-142 and HB 474 are trying to eliminate--students being placed outside of the mainstream of education.

An IEP is intended as a means of making education more personal for an individual student. Making education more personal will in-

volve assessing a student's abilities to see what he or she brings into the educational setting and then using that assessment to determine the most appropriate modalities for learning (e.g., visual, auditory, kinesthetic) and interaction (e.g., large or small group). With special assistance or through program modification, the student will be placed in a regular vocational classroom where he or she will then function as a part of the total class.

Legislative guidelines

Sections 121a.341-349 of the rules and regulations for PL 94-142 specify the procedures and guidelines for writing IEPs. The sections delineate the specifics of when they should be in effect for each child, participants in IEP planning meetings, parental participation, the content of an IEP, placement in private schools and accountability. The Federal Register of August 23, 1977 contains the rules and regulations governing the Act. The special education personnel of each district will be able to explain the local interpretation of the Law.

Developing an I.E.P.

> At this point, it is important to reiterate that if a student is able to participate in a regular vocational education program without special services or program modification, then he or she is not considered handicapped in terms of vocational education and no IEP will be written for vocational education.

When to develop an IEP

If the student will require special services or program modification, the legislation provides for the development of IEPs before special services are offered to any student. It also provides for IEPs to be in effect at the beginning of the school year. Many school districts develop IEPs during the final quarter of one school year so that they may be put into effect the beginning of

the next. For those students identified as "handicapped" after the school year begins, the IEP planning meeting must take place within thirty (30) days of the determination that a student is "handicapped". This protects the student from having to wait for services.

Team meetings

Once the assessment of the student's abilities is complete, the first of at least two team meetings will be held. This meeting should include all professionals who will be writing the IEP and will be for the purpose of reviewing the student's present situation. The professionals will thus be able to share information and reach consensus about the student's levels of performance and to discuss possibilities for an appropriate educational program. This may require more than one meeting. It is important that this phase be well planned, for it will affect the efficiency of the second phase: the actual development of the plan with the parents.

Who participates?

The planning meeting for developing the IEP will utilize all available information about the student so that effective decisions can be made concerning the student's educational program. The law identifies the following persons as those to be included in the meeting:

- a person (other than the student's classroom teacher) who is qualified to provide special education.
- the student's teacher*
- one or both parents
- the student when appropriate
- others as requested by the parents or the school
- a member or representative of the evaluation team if the student has been evaluated for the first time.

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*The interpretation of "teacher" is left to the school district. It may be the current classroom teacher, a special education teacher, and/or a teacher qualified to provide the program to be recommended (e.g., vocational educator or the Vocational Resource Educator).

It is important that appropriate vocational educators be present at this meeting so that their input about vocational programming will be felt.

When students are old enough to be considered for vocational education programs, it is most appropriate that they attend the IEP planning meeting. Decisions vital to their futures are being considered and they have an undeniable right to be a part of those decisions.

Include students

IEP Content

The completed IEP will include the following:

- a statement of the student's present levels of performance;
- annual goals and short term instructional objectives;
- the specific special education services to be provided and the extent the student will participate in regular education programs;
- projected dates for initiation and duration of services;
- evaluation procedures and time schedules.

Included in the rules and regulations is a statement regarding accountability for a student's progress. While educators must make good faith efforts directed at helping the student reach objectives identified in the IEP, they are not held accountable if in fact a child does not attain the projected goals and objectives.

Accountability

Implications for Vocational Education

Vocational educators will have a unique responsibility in the development of the IEP for an individual student. Once it has been determined that a vocational program is appropriate for an individual student, they should be involved in each of the steps either directly or indirectly. As was mentioned in Section III, "Assessment and Evaluation", they will be able to have input into the vocational aspect of the assessment procedures. This is important because it is from this assessment that the vocational

Vocational educators direct or indirect role

portion of the IEP will be developed. Vocational Educators will be involved in the planning meetings and actual writing of the IEP. This involvement may be accomplished in several ways. Two possibilities are:

- the vocational educator in whose class the student will be placed attends the meetings and has a direct role in planning the program.
- the Vocational Resource Educator serves as a liaison between the planning team and the vocational instructor.

Either of these ways requires that the vocational instructor have a knowledge of the characteristics of the student as well as the specific skills that are required for success in his/her classroom. Knowing how the steps to acquisition of these skills can be modified to meet individual student's needs will help a student with a handicap have an equal chance of succeeding.

PREPARING THE CLASSROOM ENVIRONMENT FOR MAINSTREAMING

Involve Students

When thinking about providing an equal educational opportunity for students with handicaps, the physical aspects of the classroom should be considered. Once again the instructor must consider things that are taken for granted with non-handicapped students, but which may present barriers for students with handicaps. Knowing the characteristics of the individual student will help instructors prepare individual classrooms to meet the student's unique needs. When in doubt, the instructor should ask the student how the room might be modified to make daily classroom functioning easier. Some general types of considerations for students with handicaps are as follows:

- Is seating accessible and usable for everyone?
- Is equipment accessible and usable? (Consider height and ease of operation)

- Are safety warnings understood and identifiable by everyone?
- Are exits easily identifiable for everyone?
- Are sinks and supplies accessible?
- Are restrooms accessible and usable for everyone?

Specific modifications

Specific physical handicaps will require that specific modifications be adopted. Handicaps and some modifications for each are as follows:

Visually impaired:

Visually impaired

- use of tactile and/or sound cues instead of visual cues, e.g., buzzers instead of warning lights, braille markings for light switches, supply shelves.
- slightly raised safety line on floor around dangerous equipment.
- maintaining a stable room arrangement or telling student when room has been rearranged.

Remember that there are varying degrees of visual impairments ranging from total blindness to low or limited vision. The best source of information about the modifications necessary will be the individual visually impaired student.

Hearing impaired:

Hearing impaired

- use of visual and tactile cues, e.g., warning lights instead of buzzers or bells.

Again keep in mind that degrees of hearing impairment and personal accommodation will vary from one person to the next.

Orthopedically Handicapped:

Orthopedically Handicapped

- non-skid floors
- provide space for wheelchairs
- restroom stalls at least 36" wide
- accessibility to work area, e.g., a revolving shelf for tools and other equipment
- operating switches that are accessible and usable.

There is a great variability in the types of orthopedic handicaps, thus it is especially important to work with the student in planning modifications.

Generally students with physical handicaps have been modifying their environments for some time. Chances are that a brief conversation and tour of the classroom will enable them to work with the vocational instructor to determine what modifications will be immediately helpful. After students have had an opportunity to spend some time in the learning situation, they will be better prepared to help the instructor identify other modifications necessary for their success.

TEACHING TECHNIQUES

Personalizing education for students with handicaps means that each student's learning style will be incorported into instructional planning. Many students (handicapped and non-handicapped) are not successful in school because they lack the basic academic skills necessary for success. Vocational educators are at an advantage in this area because of the learning-by-doing philosophy of vocational education. Instead of reading about a skill in a book, students in vocational education have the opportunity to observe the skill being used in real situations. The utilization of techniques such as "hands-on" experiences, field trips, demonstrations and simulated work situations enable the vocational educator to meet the unique needs of students with handicaps. The following paragraphs provide a nucleus of considerations and techniques that will be useful in helping vocational educators plan for individual students. It should be noted that although techniques may be listed under one handicap, the idea may also apply when working with another. The ideas listed here are not intended to be exhaustive of all possible techniques, but rather are intended to be "thought provokers".

Action classes

Mentally Retarded

Mentally retarded students are those whose IQ scores are less than approximately 70. Generally their mental age lags behind others of their chronological age in school achievement. Although students with mental retardation are capable of learning, they will require more time and repetition to learn a specific skill. Altman (1977) identifies the following specific learning needs for students who are mentally retarded:

Learning needs of EMR students

- transfer of learning--retarded students often have difficulty transferring skills to application. To help overcome this deficiency the use of many examples and trial period is helpful.
- incidental learning--many behaviors, especially personal-social skills, are assumed to be learned by non-retarded students and learning of these skills is not specifically planned for. To help compensate for deficiency in incidental learning, it is important to plan for helping retarded students gain the skills we take for granted in non-retarded students.
- auditory and visual memory--material that is presented may not be remembered after a brief period of time. For students who are retarded, repetition is necessary. "Over-learning" as opposed to "learning" is essential in order to assure retention of learning over a period of time.
- generalization of learning--students who are retarded often experience difficulty generalizing from practice situations to real situations. It is helpful to provide the opportunity for practice of skill in real as well as simulated situations.

Teaching students who are mentally retarded will require an analysis of course goals and objectives to determine the specific intermediate skills and steps which will lead to acquisition of the ultimate goal. These skills should then be taught with the individual's learning style in mind. Each step in the teaching-learning process will need frequent appraisal to assure that the student has mastery of the pre-requisites required for success at the next level of learning. Some specific ideas for adapting

Teach for mastery of prerequisites to next step

teaching to meet the needs of the mentally retarded are as follows:

1) Break total task into small steps which overlap and build on each other;
2) Define specific requirements for mastery of each step;
3) Give directions in a systematic and sequential manner--one step at a time;
4) Be flexible about time limits-allow more time for mastery at each step whenever needed;
5) Plan positive reinformcement for each successfully attained step as well as plan ways for encouragement whenever possible to help minimize frustration and discouragement;
6) Whenever possible utilize oral and/or visual modes of presentation rather than having students read new material;
7) Repeat assignments to assure understanding.

Specific Learning Disabilities

Average or above ability

When teaching students with a learning disability it should be remembered that these are students who have an average or above ability to learn. They are not retarded, but do require special considerations in their educational programs. Frequently they will perform above their age levels in one academic area while performing below their age levels in another. Their individual assessments will provide helpful information about the most appropriate learning style. Some of the things to consider when planning for mainstreaming students with learning disabilities are as follows:

1) Present materials in a manner that uses a combination of senses, e.g., visual and auditory or tactile;
2) Plan ways for students to manipulate learning materials;
3) Plan for consistency in daily routine;
4) Utilize students' strong areas to develop skill in other areas;
5) Break tasks into small components or steps;
6) Utilize programmed or video taped material to supplement classroom instruction.

Behavior Disordered

Need support and encouragement

Students who are behavior disorderd will benefit from a classroom climate that is supportive and encouraging. Behavior disordered students are generally capable of average or above performance; however, because of their emotional disturbance, they are unable to function in a regular educational setting. Personal-social skill deficiency prevents them from developing appropriate and effective relationships with peers or adults. Their classroom functioning is minimized because of emotional interference. The following are suggested as techniques or ideas that will provide teachers with a basis for planning classroom learning for behavior disordered.

1) Maintain consistency in daily routine from one day to the next;
2) Help students relate their behavior to the consequences of that behavior for themselves and/or for others;
3) Encourage students whenever feasible. They each need more frequent recognition when they've done a "good job" no matter how small;
4) Provide opportunity for positive peer interaction through one to one or small group activities;
5) Allow students the opportunity to work in an area with minimal distractions.

Visually Impaired

Independent living with orientation help

Visually impaired students are usually able to function quite well in almost any environment once they have become accustomed to the physical surroundings. They are able to lead independent lives. Some of the considerations for planning instruction are:

1) Use of large print charts or textbooks;
2) Having tape recorders available for student use;
3) Use magnifiers or talking books whenever feasible;
4) Involve peers as readers or as recorders of textbook informaion;

5) Use an overhead for demonstrations usually done on chalkboard;

6) Provide students with readiness activities that will enable them to have "hands-on" experience and/or materials to be used in lessons;

7) Verbal as well as written presentation of material.

Hearing Impaired

Vary communication forms

As in each of the other handicaps the degree of severity of the impairment with each person will determine the necessary classroom instructional technique. In general a communication style that utilizes a combination of communication forms is the most effective. Only 30% of spoken English is visible on the lips and only about 50% of the English sounds can be differentiated from other English sounds on the lips, e.g., /b/and/v/. Thus, depending on speech-reading alone is inadequate. Total communication, a form which utilizes a number of modes of communication is effective. Some teaching considerations include:

1) Utilization of "Total Communication" to the greatest extent possible.

2) Placement near front of room (or wherever is nearest speaker).

3) Use of interpreters.

4) Utilization of peer assistance for clarification.

5) Written as well as verbal presentation of materials.

Orthopedically Handicapped

Wide variety

As has been stated earlier, the types of orthopedic handicaps and their subsequent effects on learning are as varied as the handicapping conditions. The teaching techniques range from modifying the physical environment by providing space and accessibility for people in wheelchairs, to more complex curriculum modifications. The following techniques will be helpful in planning for any of the orthopedic handicaps.

1. Consider the physical requirements in terms of manipulative tasks, strength/stamina and relative percentage of coursework

requiring each.

2) Plan alternative ways for students to demonstrate mastery.

3) Allow for physical fatigue and encourage students to break total task into segments that can be accomplished at different settings.

4) Plan times/ways for students to acquire and practice communication skills.

5) Plan for ways to make certain that students have access to materials/equipment as they need them by making them accessible directly to students, or by having other students readily available to assist as needed.

Summary of Teaching Techniques

Following are general guidelines that will be useful to anyone working with students with handicaps. They are adapted from materials developed by the "Project Tomorrow" staff at Colorado State University (see Altfest, M. in resources list for this chapter).

Program Planning

Program Planning Considerations:

- train for mastery and employability levels which match student's potential;
- provide academic teachers with information about academic skills needed for mastery of vocational skills;
- provide for shorter instructional periods and extended total time limits for mastery;
- utilize multi-modal approaches to instruction, e.g., combine visual presentation with auditory or manipulative with demonstration;
- plan for frequent positive feedback procedures;
- plan for teaching concepts normally assumed as incidental or generalized learning;
- maintain consistency in routine classroom procedures;
- utilize parents and other community members to assist with special needs of individual students.

Classroom ideas

Classroom Techniques:

- involve students in planning;
- begin instruction at student's present level;
- plan assignments that have a specific outcome and help

students see purposes;

- utilize "hands-on" experiences whenever feasible;
- provide for on-going student evaluation and re-learning;
- utilize means of learning other than reading;
- maintain a classroom structure that enables students to predict what will happen throughout the classtime;
- present information in small steps;
- identify information or skills that are pre-requisite to learning new material. Be certain student possesses the pre-requisities before presenting new or different information.

CLASSROOM ORGANIZATION AND MANAGEMENT

Already busy

One of the first questions educators ask about mainstreaming relates to the time the classroom teacher will have to spend on the process. Many voice the opinion that their day is already full and they don't have the time to do a good job of everything even before considering mainstreaming. This is a valid concern for the teachers and one which should be addressed in a straight-forward manner.

Gradual progress

In the beginning, planning for the mainstreaming of individual students will take longer than regular planning; however, it has been the experience of others that after a time the process becomes a part of the class routine. When the student's I.E.P. specified a vocational education program, it was determined that the student could in fact succeed in a vocational program with certain special services and/or modification. Working with the Vocational Resource Educator will help the classroom teacher utilize the services available to make classroom management easier.

The general guidelines for program planning (see p.) include ideas that are easily incorporated into everyday planning. Once again, the real key is to analyze each of the tasks required to

learn the course content and then matching the requirements to the student's abilities to see what modifications are necessary for success. Once the task analysis has been completed, it can be used with each new handicapped student. The more the educator works with matching task requirements to student skills, the easier the process will become. The Vocational Resource Educator will be able to assist the vocational instructor in his or her early efforts. In addition, talking with other instructors to share successful techniques will provide an additional resource.

Establish tasks required

Attitude Development

As was mentioned in Section IV, one of the most influential factors in student success is attitude--the attitude of the student himself or herself, the attitude of the instructor and the attitude of other students. Each of these must be considered when planning for mainstreaming.

Students with handicaps may enter the learning situation with low feelings of self-esteem. They may feel hopeless and helpless about their futures. New situations may be alien territory in which they are afraid of failing. They may be unfamiliar with work models and therefore have a limited knowledge of worker expectations. Some ideas for helping students to develop positive attitudes toward themselves and the learning task are as follows:

Helping students accept themselves as worthy

- plan success-guaranteed learning opportunities, i.e., small enough steps for success to be inevitable;
- plan ways for students to be able to define for themselves successful completion of a task;
- help students establish their own attainable goals;
- help other students learn to recognize success of others;
- allow for slow reactions/responses to questions;
- expect students to attain success;
- encourage students for specific efforts;
- make directions explicit;

- provide opportunities for positive-peer relationships through team or small group activities;
- establish rules and regulations that are clear, limited in number and consistently enforced;
- encourage participation in student and/or community groups, e.g., school, clubs, church groups;
- emphasize contributions of students groups;
- provide opportunity for students to talk with workers who have similar handicaps as students;
- encourage expression of student ideas and opinions;
- let students know about their progress;
- talk with students to determine ways they can be helped to succeed.

Communicate respect

Teacher attitudes toward students are communicated in subtle ways. It is important for teachers to be aware of the impact their attitudes have on the students themselves as well as on the attitudes of other students toward their peers. If a teacher expresses unacceptance through facial expressions or other "body language" students will sense this and will in turn reflect the same attitude in their behavior toward individual students. Some things teachers can do to communicate respect and acceptance of each person in their classrooms are as follows:

- if criticism of a student is necessary, do so in a private conference with the student;
- when determining classroom expectations, consider the value/behavior norms with which the student lives;
- let students know when there are going to be changes in class procedures and help students adjust to changes;
- accept plateaus/slight regressions in learning as normal;
- admit own mistakes/humanness;
- be realistic in expectations for self, i.e., don't expect miracles or to be totally successful with EVERY student;
- plan a variety of ways for students to demonstrate mastery;
- treat each student as you expect other students to treat him or her.

Students can either be very kind or very rude to each other. When mainstreaming it is vital that time be spent preparing other students for working along with the students with handicaps. Other students can be a great source of assistance within the classroom, but it is important that they approach the task in a manner that is helpful rather than condescending or patronizing. Some of the things that can be done with other students are as follows:

Students helping students

- spend time talking about various handicaps and the effects those handicaps have on the lives of people who live with those handicaps;
- provide opportunity for students to have simulated experiences with being handicapped for a part of a day;
- after simulation, provide opportunity for students to talk about frustrations and feelings during the time they were "handicapped". Include students who are handicapped in discussions so they can share their <u>own</u> frustrations;
- establish a "buddy system" in classroom, e.g., have students work together to get equipment out and put away;
- establish procedures whereby students help other students if they don't understand an assignment;
- involve all students in planning ways they can help each other.

In order for any of the above ideas to work, it is important that a cooperative atmosphere be established in the entire school. The mainstreaming process requires that everyone work together to maximize the learning opportunity for students with handicaps.

Cooperative school atmosphere

COMMUNITY AND PARENT INVOLVEMENT

Parents and other community members can be helpful resources in the mainstreaming process. They can serve both in-school and out-of-school needs. In-school they can serve as aides to the instructional process while out-of-school they can serve as support and public relations persons for the school's mainstreaming program. Effective use of the skills of community members and parents will enhance the total vocational program.

Parent Involvement

Early involvement

As was mentioned earlier, the legislation provides for the inclusion of parents in the final development of an IEP. Their involvement at the very earliest stages offers an excellent opportunity for enlisting their assistance in other aspects of the program. At the time the IEP is developed, they can be invited to participate in assisting in activities that directly involve their child or in activities that are wider in scope. Some of the in-school activities parents might become involved in are:

In school

- recording lessons, textbook assignments for use with non-readers and visually impaired.
- reinforcement of learning in small group settings, e.g., drill-work on basic facts or other material that requires repetition for learning;
- helping students with limited mobility move from place to place;
- making instructional materials, e.g., large print charts, practice lessons.

In addition, they may also be enlisted to do some at-home training of their child to help assure his or her success in the program.

If parents are to be involved in at-home activities with their sons or daughters, care should be taken that the activities are activities that can be incorporated into the daily routine. This means that they should not become involved in actually teaching course content to their child, but rather should reinforce learning and help him or her acquire readiness for learning new content. The school can provide support for parents of students with handicaps by providing a parent education program. The focus of this program could be in a number of different areas. The programs might include the following topics:

Parent Education

- developing student's independent living skills;
- developing home-help plans;

- employment potential;
- understanding adult functioning of students with handicaps;
- parent involvement in legislation for the handicapped and in national parent groups.

Brolin and Kokaska (1978) have an extensive and useful chapter on parent involvement in their forthcoming book. It will serve as an excellent resource for anyone interested in developing a parent education program. In addition, West (1977) has identified ways the family can become involved in helping students acquire competencies in daily living skills, personal social skills and occupational guidance and preparation skills. Some of the methods she suggests are:

Out-of school help

- provide opportunities for managing money for daily living needs;
- provide opportunities for planning, purchasing and preparing meals;
- help student become familiar with public transportation;
- provide opportunities for social interaction;
- provide opportunities for independent decision-making;
- take student to various job sites and talk about work and workers.

Parents of children with handicaps have organized nationally to provide support for each other as well as to lobby for legislation for educational opportunities for the handicapped. Their efforts have been quite successful as many of the programs offered today are a result of parental pressure. Thus, parents of students with handicaps are an already interested group as a whole and will be able to add a helpful dimension to the total mainstreaming process. The foregoing are just a few of the ways parents may become involved at home and at school in the learning of their sons and daughters.

Community Involvement

Out of school

Community members (other than parents) will be a strength in the mainstreaming process. They too, can lend support to in-school as well as out-of-school activities. Although they can assume the same in-school volunteer roles as to parents, the most effective use of community members will be in external activities. They can serve in an advisory capacity to school personnel. Key community members can help identify potential job sites for students with handicaps. Public relations, i.e., telling others about the program and its outcome is another area in which community members can play a vital role.

Advisory role

Community members have always been involved in an advisory role with vocational education. No other educational program has so consistently and effectively utilized the input of an advisory council as has vocational education. This readily available structure provides an excellent means for working toward greater community involvement. They will be able to lend assistance in all areas of community involvement. It would be beneficial to spend some time educating the Advisory Council to the purposes and activities of the mainstreaming process. In addition, it would be beneficial to the total program if there were people with handicaps on the Advisory Council.

Organization

Service groups and other community organizations are ready-made audiences for the mainstreaming story. The more people know what's happending within the school, the more potential employers there will be. It is important that as many people as possible hear first-hand about the employment potential of people with handicaps. Programs presented to these groups might include a student presently enrolled in the program, an employed graduate and an employer who has had a successful experience employing a person with a handicap.

A form should be available so that interested people can request more information about the program.

From efforts with the Advisory Council and other community organizations will emerge a nucleus of people with whom the Vocational Resource Educator can work to develop further activities designed to inform the community at large about the program. Creating an "awareness campaign" will help create an interest in the handicapped as workers. Some things to consider as activities follow:

- Public Service Announcements on radio and television;
- Bumper stickers;
- Newspaper articles;
- School open house;
- Develop a brochure to be distributed to community groups;
- Shopping center displays;
- Billboards;
- Newspaper ads.

Keep efforts going

Any involvement of community members requires that involvement efforts are ongoing. This means that activities should be spread throughout the entire year rather than concentrated in one week or month. People want to get involved, but sometimes it takes several contacts for them to see just how they can fit into the program. Persistence in this area will pay dividends of increased community interest in the program as well as in more people who are willing to hire a person with a handicap.

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SECTION VI

JOB PLACEMENT/EMPLOYMENT/FOLLOW-UP

Job placement for students with handicaps presents the VRE and the placement specialist with a unique challenge. In considering potential placement possibilities it is necessary to have knowledge about the job requirements and about the individual beyond that required when placing non-handicapped persons. Placing students with handicaps will also require effort directed toward educating employers about hiring students with handicaps. Working with students who are handicapped requires that the full range of employment possibilities be considered. Stereotypes of particular jobs for certain handicaps should be avoided.

Cooperative effort: VRE and Placement Specialist

Although each school will have a person who is responsible for the placement of students in jobs, it is suggested that a cooperative effort be established between that person and the Vocational Resource Educator. The VRE will have expertise in the area of placing students with handicaps and will be able to aid in maximizing the existing and new placement possibilities. The remainder of this section will focus on the total job placement process for students with handicaps. It will include discussions of legislation affecting the hiring of persons with handicaps, job development, pre-employment skills, job placement and follow-up/follow-through procedures.

LEGISLATION

"Hire the Handicapped--It's Good Business". Almost everyone has seen posters with this slogan. Now, for any employer with a federal contract, it's not only good business, it's also the law. Sections 503 and 504 of the Rehabilitation Act of 1973 (PL 93-112) mandate the hiring of persons with handicaps. Every vocational educator, counselor, student and employer should be made aware of the provisions of this law.

PL 93-112 Section 503

Section 503 requires that anyone with a federal contract for more than $2500 must take affirmative action in the hiring of people

with handicaps. This means they not only hire the handicapped but also actively recruit and advance people with handicaps. In addition to an affirmative action program, they must make accommodations for the physical or mental limitations of handicapping conditions. Accommodations include making facilities accessible and usable as well as modifying and adapting equipment and job tasks. The U. S. Department of Labor makes copies of the regulations available through the Employment Standards Administration, U. S. Department of Labor, Washington, D.C. 20210.

Section 504

Section 504 is often referred to as the civil rights law for the handicapped. This law prohibits discrimination against otherwise qualified persons with handicaps in any program or activity receiving federal financial assistance. Each federal agency is responsible for establishing its own regulations for recipients of that agency's funds. In 1977 the Department of Health, Education and Welfare adopted regulations governing recipients of H.E.W. funding. These regulations prohibit discrimination against qualified persons with handicaps in the following areas:

H.E.W. regulations

- Recruitment, advertising, and the processing of applications for employment;
- Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff, and rehiring;
- Rates of pay or any other form of compensation and changes in compensation;
- Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;
- Departure and return from leaves of absence, sick leave, or any other leave;
- Fringe Benefits available by virtue of employment, whether or not administered by the recipient;
- Selection and financial support for training, including apprenticeship, professional meetings, conferences, and other re-

lated activities, and selection for leaves of absence to pursue training;

- Employer sponsored activities, including social or recreational programs; and
- Any other term, condition, or privilege of employment.

(Subpart B-Section 84.11 H.E.W.Regulations)

In addition to the above regulations provisions are made that prohibit sub-contracting to persons or groups that discriminate against qualified applicants or employees with handicaps. The regulations also provide that reasonable accommodations be made in facilities, job tasks, work schedules and equipment. In employee selection the employer may not use tests or criteria that screen out people with handicaps unless the skills or criteria are required in the performance of the job and no alternative screen-procedures are available. It is illegal to inquire about the extent of handicapping conditions in pre-employment interviews, but it is permissable to ask about an applicant's ability to safely perform the tasks required. Exception is made if the inquiry is made in order to improve existing conditions or to comply with Section 503.

Screening applicants

An area that is related to laws pertaining to hiring people with handicaps is the concern for insurance. Many employers have the misconception that their workmen's compensation premiums will automatically increase if they hire a person with a handicap. Insurance companies do not compute premiums on the basis of the physical condition of employees. An employer's classification is determined by the nature of the firm and hazards related to that firm. In some instances individual employer rates are figured on the past history of industrial accidents in that company. Thus, premiums are based on job and hazard factors rather than on employee factors. Appropriately placed persons with handicaps are no more prone to on-the-job accidents than are non-handicapped persons.

Insurance

JOB DEVELOPMENT

Expanding opportunities

The major task of job development is to identify new and expand existing job opportunities for persons with handicaps. This will require that personal contact be made with potential employers so that their concerns and questions about hiring persons with handicaps can be dealt with directly. The VRE will be an excellent person to coordinate and/or carry out these efforts. Other school personnel who are involved in placement activities will also be resources for cooperative job development activities.

Local agencies

A starting point for identifying potential employers will be the employers who are already working with the school as they are familiar with the school's training and placement procedures. Another source for identifying potential employers will be community agencies. The state's Vocational Rehabilitation Agency and the local Job Service Agency of the state's division of Employment Security are two possibilities. The Job Service Agency is required by law to provide at least one staff member to help people with more severe handicaps find training or employment and to make sure all people with handicaps receive service. Working with agencies such as these will serve a two-fold purpose. It will help avoid duplication of services and it will also provide a resource for the agency.

Organizations

Other sources for job opportunities are local Chambers of Commerce and organizations for business people such as Jaycees, Sorosis, Rotary, Business and Professional Women, Kiwanis and Optimists.

Labor & Management

When considering potential employers, it is necessary to know whether the jobs available at the worksite are union or non-union. If unions are involved, it will be important to establish a relationship with both labor and management. The person working with placement of all students will be familiar with the local union structure and will be able to provide the names of labor leaders with whom to initiate dialogue. The inclusion of labor in talks with management and vice-versa, will aid in the development of a mutually acceptable affirm-

ative action program and will facilitate the entry of persons with handicaps into that worksite. After potential employers are identified, personal contact must be made with each one. Some of the ways this might be accomplished are:

Contact

- A personal visit to their worksite;
- A phone call;
- Inviting them to a special "open house" at the school so they can see students with non-handicapped students;
- A letter of introduction and inquiry about job opportunities.

A combination of any or all of the above would be more effective than the use of one alone. In addition to the above, it would be helpful to develop a packet of information which contains such things as information about legislation, about abilities of people with specific handicaps and perhaps statements from employers who have had experiences with employees who have handicapping conditions. This packet could then be used to promote hiring people with handicaps and to provide information to those who are actively involved in an affirmative action program.

Develop a filing system

Once contact has been made and employers have indicated a willingness to take part in the placement program for persons with handicaps, a filing system must be developed so that employer information can be stored for easy access. One way to organize material is by job description, another is by worksite. In addition to a filing system, it is important that two-way communication be established. This will be discussed under Job Placement beginning on page 72.

PRE-EMPLOYMENT SKILLS

Worker skills

The decision of whether to hire one qualified person or another is often made on the basis of the way they present themselves--in writing and in person. In addition, very few people lose their

jobs because they do not have the skills required for the work task assigned to them. People lose jobs because they do not follow work rules, because of their work-attitude or because they do not get along with their supervisors or their co-workers. This is a clear mandate for systematic development of skills that are separate from specific job skills.

Before getting into a "real life" situation, students with handicaps need training and practice in areas such as working with others, work rules, writing resumés, filling out job application forms and interviewing just as non-handicapped students do. They also need training and practice in dealing with the attitudinal barriers they will face in pre-employment and on-the-job situations. As with any other minority, they will have to work conscientiously toward dispelling myths and prejudices of employers and co-workers. These kinds of activities should be written into the student's IEP.

Plan for activities

Organizing to assure that students receive training and practice in each of these areas may be accomplished in many ways. Once again the least restrictive environment concept must prevail. This means that to the greatest extent possible the students should receive practice and training with non-handicapped students. The following are a few possibilities for assuring that students with handicaps have opportunities for training and practice in pre-employment skills:

- Classes as part of the regular vocational education program, conducted on a regularly scheduled basis, e.g., twice a week;
- Coordination with sending school to have personnel in that school plan for teaching pre-employment skills as part of regular curriculum, e.g., English classes, speech classes;
- Coordination with special education to have the skills taught or enriched in special education classes;
- Conduct a special day long workshop for students to learn skills and then provide follow-through experiences in which students can practice skills learned.

Help build background

Students with handicaps will need many opportunities to practice the skills. Their backgrounds have often been void of any kind of work experience such as baby-sitting, mowing lawns, or paper routes. They may, therefore, be naive about the expectations of workers in general. It may be necessary to precede training in pre-employment skills with an orientation to the world of workers and employers focusing on what is expected of someone who works for someone else. Topics to be covered might be:

- punctuality;
- attendance;
- attitude toward work;
- personal appearance;
- following directions;
- asking questions.

Peer group support

Including students with handicaps with non-handicapped students will help each to better understand and deal with the other. If students with handicaps have the opportunity to discuss their peers' prejudices and stereotypes openly, they will be better able to deal with employers' and co-workers' prejudices and stereotypes. On the other hand, if non-handicapped students have the opportunity to talk openly with their peers who have handicaps about their handicaps, they too will gain greater understanding. This increased understanding in the classroom will, in turn, lead to more understanding in the workplace and will help to destroy attitudinal barriers. Some of the topics for discussion might be:

- how to deal with problems related to handicap;
- how to deal with potential discrimination;
- how/when to tell employers about handicap;
- how to tell co-workers about handicap;
- information about legal rights of people with handicaps.

The instructional methods to utilize will vary from topic to topic.

Vary methods

Some goals may be best achieved through the use of large group sessions while small group discussions may be most suitable for others. In general, it is best to practice skills in situations that simulate real situations as closely as possible. For these role play can be effective. Video or audio taping of role play situations will expand and extend its usefulness. Self-appraisal is an effective learning technique for students. When viewing video tapes, it is best to help students focus on what could be done differently to help them be more effective rather than what was "bad" about the tape. Some things that lend themselves well to taping include:

- job interviews;
- on-the-job problems;
- handling barriers (attitudinal and physical).

Use community people

Many personnel directors will be willing to participate in role play situations. By using people actually responsible for interviewing job applicants, students with handicaps can be in to predict the situations that they will encounter in real interviews. The role play situations will help sensitize the interviewer to the handicapped. It will be of benefit to students if someone who is reluctant to hire a person with a handicap is involved in the interviews. In this way students will have advanced experience dealing with that reality in a safe and supportive situation.

JOB PLACEMENT

Once job potential has been developed and pre-employment skills practiced, the students are ready for putting their skill to work in a real setting. Every school should maintain an active placement service. Efforts should be coordinated between area schools and sending schools to eliminate duplication of services and to establish processes by which information can be shared. The Vocational Resource Educator will be able to work with placement specialists in

Equal opportunity

all schools involved to assure that students with handicaps have the same placement opportunities that non-handicapped students have. It is important that placement of students with handicaps is included as part of the total placement program. This will help eliminate the conception of them as different or separate from the non-handicapped. If they can be viewed as qualified job applicants first and handicapped second, the placement potential will be expanded.

When establishing a job placement service, the following must be considered:

- How will the Family Rights and Privacy Act (1974), Buckley Amendment affect placement procedures?
- How will student and employer information be managed?
- How will a student be place on-the-job?

Confidentiality

The Buckley Amendment has an impact on the placement program in three areas:

- confidentiality of recommendations;
- sending records to employers;
- assurance against third party misuse.

Procedures must be established to inform parents and students* of their rights under the Act. In turn, policies must be established for providing access. Students or parents who choose to do so may waive their right of access to their placement records, thus maintaining their confidentiality. The person who is completing a recommendation for a student should be informed about whether or not it is to be held confidential. Including this information on the recommendation form is useful.

Students or parents have choices

Before sending records to an employer, the parents or student must sign a request form. This may be done each time records are sent or a blanket request can be made for records to be sent to any prospective employers. If a blanket request is made, a record must be

*Parents if student is under 18; Student if he or she is 18 or older.

kept of where, when and to whom records were sent.

The "third party" clause means that an employer to whom records have been sent (second party) may not disclose the records to anyone else (third party). A statement prohibiting third party use of the records must accompany all records sent to prospective employers.

Stay current

The management of student records and employer information must be organized in such a way as to insure that information is current and communicated to appropriate persons. For each student, the placement office should have a personal data sheet, resumés and letters of recommendation for each student. They should have a data sheet and job orders for every employer.

When information files are complete, students are then matched with potential jobs. Interviews are arranged and placement papers are sent. In this process the placement specialist has a responsibility to make sure that students with handicaps are adequately prepared for the interviewing process.

Following the interview, follow-through must take place. The student has the responsibility of letting the placement specialist know if he or she was or was not hired. If the applicant was hired, the next step, follow-up and follow-through will take place.

FOLLOW-UP/FOLLOW-THROUGH

Program evaluation

Once students are placed on a job it is important that follow-through activities take place. Even though the student may now be a graduate, studying on-the-job success/satisfaction affords an excellent form of program evaluation. Working with future students can be made more effective if information about what aspects of the training program were effective and/or ineffective. Using placed students' on-the-job experiences will provide first-hand information about the problems encountered and will help to better prepare students who will follow.

Follow-through activities should take place two or three times during the first year of employment. They may be made in person, via a phone call or by mail. Contacting the employer as well as the employee will provide helpful information for program-planning.

Follow-up activities should take place annually or bi-annually for several (5+) years after initial placement of a student. This will provide information about such things as advancement, job changes, job satisfaction, and additional training obtained. This information will be helpful in evaluating the long term effectiveness of the program as well as to provide a data base to present to prospective employers and to students just entering the program.

Accountability

The total process of job placement is one of the most important aspects of working with students with handicaps. We would do them a grave injustice if we gave them job skills and then did not support those skills with job-seeking and survival skills.

RESOURCES

The following resources will provide helpful ideas for working with job placement of students with handicaps.

Affirmative action to employ handicapped people: How the new law on federal contracts affects the employer/protects the jobseeker and employee. Washington, DC: U. S. Department of Labor, Employment Standards Adminstration.

AFL-CIO. Working together...The key to jobs for the handicapped. Washington, DC: The President's Committee on Employment of the Handicapped, 1973.

Atelsek, F. and Mackin, E. Diversifying job opportunities for the adult deaf. Washington, DC: Alexander Graham Bell Association for the Deaf, 1971.

Employment of diabetics: A statement of the Committee on Employment and Insurance, American Diabetes Association. Diabetes, 1972, 21 (7), 834-835.

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President's Committee on Employment of the Handicapped. Architectural Checklist: making colleges and universities accessible to handicapped students. Washington, DC: Author, no date.

Wolfe, J. Disability is no handicap for duPont. Alliance Review, 1973. Reprinted in the President's Committee on Employment of the Handicapped.

GENERAL RESOURCES

The Resources listed on the following pages are those which are of general assistance to those involved with mainstreaming students with handicaps into vocational education programs.

ESPECIALLY HELPFUL MATERIALS

The following materials are those which this writer found especially useful in the preparation of this document. Their inclusion here is not intended to identify them as the best materials, but rather as those which would be of general value to anyone who is just starting in the mainstreaming process.

Altfest, M. Vocational education for students with special needs: a teacher's handbook. Fort Collins: Colorado State University, Dept. of Vocational Education, 1975.

Brolin, D. Life centered career education: a competency based approach. Reston, VA: Council for Exceptional Children, 1978.

Council for Exceptional Children. Administrative policies for vocational education of handicapped students, Davis, S., Project Director, Reston, VA: 1978.

Project PRICE, Brolin, D., Project Director. Columbia, MO: University of Missouri-Columbia, 1977.

Regional Rehabilitation Research Institute on Attitudinal, Legal and Leisure Barriers. George Washington University, 1828L Street, N.W., Suite 704, Washington, D.C.: 20036.

Rehabilitation Services Administration. Ready reference guide for disabled people. Washington, D.C.: U. S. Department of Health, Education and Welfare, 1977.

Special Education Rehabilitation Vocational Education (Project SERVE). Charles Wrobel, Manager, 3300 Century Avenue North, White Bear Lake, Minnesota 55110

Technical Education Research Centers, Inc. Guidance counseling and support services for high school students with physical disabilities, Foster, J., Project Director. Cambridge, MA: Author, 1977.

Weisgerber, R. Vocational education: teaching the handicapped in regular classes. Reston, VA: Council for Exceptional Children, 1978.

BIBLIOGRAPHIES

The following resources either are or contain bibliographies of additional resources. Combined they provide information about the very best of resources for mainstreaming students with handicaps into regular vocational education programs.

Accommodating special needs students: periodicals bibliography. Division of Special Vocational Needs, University of Nebraska-Lincoln 68588.

Altfest, M. Vocational education for students with special needs: a teacher's handbook. Fort Collins: Colorado State University, Dept. of Vocational Education, 1975.

Committee for the Handicapped. Directory of organizations interested in the handicapped. Washington, D.C.: People and People Program, 1976.

Hersh bach, D., Smith, M., & Kessler, M., eds. Cooperative work experience: annotated resource guide for teachers of the handicapped. College Park: University of Maryland, Dept. of Industrial Education, 1976.

Magisos, J. & Stakelton, A. Special needs populations: annotated bibliographies on bilingual, correctional, migrant, and handicapped populations with unique vocational education needs. Columbus: Center for Vocational Education, 1975.

Missouri Governor's Committee on Employment of the Handicapped. Directory of organization resources for handicapped. Jefferson City, Author, 1977.

National Association of Vocational Education Special Needs Personnel. 100 successful vocational special needs programs. Washington, D.C.: American Vocational Association, 1975.

National Training Project for the Development and Implementation of Vocational Teacher Education Programs for Working With the Handicapped. Journals, bulletins and newsletters of interest to special vocational needs educators.

President's Committee on Employment of the Handicapped. Bibliography of secondary materials for teaching handicapped students. Washington, D.C.: Author, no date.

Rehabilitation Services Administration. Ready reference guide for disabled people. Washington, D.C.: U. S. Department of Health, Education and Welfare, 1977.

Teaching Learning Materials. Curriculum Materials for vocational, technical, career, special needs education. New Brunswick: New Jersey Vocational Technical Curriculum Laboratory, Rutgers University, 1978.

DIRECTORIES OF SERVICES AND MATERIALS

(Most of these directories must be purchased)

American Annals of the Deaf: Directory of Programs & Services
American Annals of the Deaf
5034 Wisconsin Avenue, N.W.
Washington, DC 20016
(202) 363-1327

Directory of Agencies Serving the Visually Handicapped in the U. S.
American Foundation for the Blind, Inc.
Publications Division
15 West 16th Street
New York, NY 10011
(212) 924-0420

Directory of Counseling Services
International Association of Counseling Services, Inc.
1607 New Hampshire Avenue, N.W.
Washington, DC 20009
(202) 232-6729

Directory of Organizations Interested in the Handicapped
Committee for the Handicapped
People-to-People Program
1028 Connecticut Avenue, N.W., #610
Washington, DC 20036
(202) 223-4450

Publisher Source Directory
Ohio State University Press
Publications Sales Division
2070 Neil Avenue
Columbus, OH 43210
(614) 422-6930

Ready Reference Guide: Resources for Disabled People
Office of Special Programs
Rehabilitation Services Administration
330 C Street, S.W.
Washington, DC 20201
(202) 245-0820

Training Resources Directory (and supplements)
Continuing Education Program for
Rehabilitation: Region 2
State University of New York at Buffalo
416 Christopher Baldy Hall
Amherst, NY 14260
(716) 636-2517

Yearbook of Special Education, 1976-77
Marquis Academic Media
200 East Ohio Street
Chicago, IL 60611
(312) 787-2008

Handbook on the Legal Rights of Handicapped People
President's Committee on Employment of the Handicapped
Washington, DC 20210
(202) 653-5067